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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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07/24/2001

Yutaka Tsuda

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09/08/2004

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EXAMINER

WHIPKEY, JASON T

ART UNIT

PAPER NUMBER

2612

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/910,882

Applicant(s)

TSUDA, YUTAKA

Examiner

Jason T. Whipkey

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2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-10, 13-16 and 18 is/are allowed.
- 6) ☒ Claim(s) 1-4 and 11 is/are rejected.
- 7) ☒ Claim(s) 12 and 17 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-4 and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Niikawa (U.S. Patent No. 6,710,809).

Regarding claim 1, Niikawa discloses, as shown in Figure 6, digital camera 1 with an image memory 209 comprised of a DRAM (“a volatile memory”) (column 8, lines 11-13). Power supply source E, consisting of four batteries, powers the camera (column 6, lines 19-21), which includes image memory 209. Voltage detection circuit 260 (“a detector”) periodically detects the voltage (“a remaining capacity”) of power source battery E and sends the result to general controller 211 (“a maintainable time calculator”) (column 9, lines 34-36). General

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controller 211 calculates the available operation time period ("a maintainable time") of the digital camera 1 based on the detected voltage (column 13, lines 39-54).

Regarding claim 2, Niikawa's camera includes sub-display 100 for displaying the calculated time T (column 13, lines 55-56).

Regarding claim 3, as shown in Figure 6, a memory card slot ("a connecting portion") receives memory card 8 ("an external memory") (column 9, lines 16-18).

Regarding claim 4, Figure 6 shows that memory card 8 is detachable. It is inherent that some sort of connector is present in order to transfer data between the camera and the card.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sasaki (U.S. Patent No. 5,018,017) in view of Niikawa.

Sasaki discloses an electronic still camera, as shown in figures 6A and 6B. The camera temporarily stores image data in buffer memory 31₆ (column 10, lines 33-44). Buffer memory 31₆ loses its contents when power is lost (column 10, lines 33-51), making it a volatile memory. Image data is written from buffer memory 31₆ into memory card 15 if sufficient space exists on

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the memory card (“a first recording mode”) (column 11, lines 34-45). CPU 24₁ (“a recording mode selector”) detects whether such space exists and performs the transfer, if applicable (column 10, lines 60-68). If space is unavailable, the image data is held in buffer memory 31₆ (“a second recording mode”).

Sasaki is silent with regard to calculating and displaying a remaining time for holding the image data in memory.

Niikawa discloses, as shown in Figure 6, digital camera 1 with an image memory 209 comprised of a DRAM (“a volatile memory”) (column 8, lines 11-13). Power supply source E, consisting of four batteries, powers the camera (column 6, lines 19-21), which includes image memory 209. Voltage detection circuit 260 (“a detector”) periodically detects the voltage (“a remaining capacity”) of power source battery E and sends the result to general controller 211 (“a maintainable time calculator”) (column 9, lines 34-36). General controller 211 calculates the available operation time period (“a maintainable time”) of the digital camera 1 based on the detected voltage (column 13, lines 39-54). Niikawa’s camera includes sub-display 100 for displaying the calculated time T (column 13, lines 55-56).

As stated in column 3, lines 9-12 and 21-26, an advantage to calculating and displaying a remaining operational time is that the camera may shut down power-consuming features and inform the user of the amount of battery time available, allowing the user to plan accordingly. For this reason, it would have been obvious at the time of invention to have Sasaki’s camera calculate and display a remaining time for holding the image data in memory.

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Allowable Subject Matter

6. Claims 5-10, 13-16, and 18 are allowed.

Regarding claims 5-10 and 13-16, no prior art could be located that teaches or fairly suggests an electronic camera that calculates a time during which a camera is operational and a volatile memory is maintained by subtracting a maintain capacity, which is calculated based on a desired data maintain time set by a setter, from a detected battery capacity.

Regarding claim 18, no prior art could be located that teaches or fairly suggests an electronic camera that calculates (a) a time during which a volatile memory can be maintained based on a detected battery charge, and (b) a time during which a camera operation can be maintained based on a detected battery charge, and displays both on a display.

7. Claims 12 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding both claims, no prior art could be located that teaches or fairly suggests an electronic camera that calculates a time during which a camera is operational and a volatile memory is maintained by subtracting a maintain capacity, which is calculated based on a desired data maintain time set by a setter, from a detected battery capacity and displays both the memory maintainable time and calculated camera operational time on a display.

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Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason T. Whipkey, whose telephone number is (703) 305-1819. The examiner can normally be reached Monday through Friday from 8:30 A.M. to 6:00 P.M. eastern daylight time, alternating Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy R. Garber, can be reached on (703) 305-4929. The fax phone number for the organization where this application is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JTW

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September 1, 2004


TUAN HO
PRIMARY EXAMINER